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REMARKS

In the non-final office action mailed April 19, 2007, claims 1-14 and 44-69 were pending based on the claims submitted in the previous response dated January 22, 2007. Claims 1, 5-7, 11-14, 44-47, 51-57, 60-69 stand rejected. The Office Action fails to identify claims 2-4, 8-10, 48-50 and 58-59 as pending in the present application. Since these claims have not been cancelled by the applicant, these claims should have been indicated as pending in the present application. In the Office Action dated February 8, 2005, these claims were indicated to be withdrawn in view of the Restriction Requirement, but applicant has not cancelled these claims and as such they are entitled to reinstatement upon allowance of the claim from which each depends.

In this response, claims 1, 44 and 55 have been amended, and claims 65, 66 and 68 have been cancelled. Reconsideration of the present application as amended in view of the remarks that follow is respectfully requested.

Regarding claims 8-10, 48-50, 58 and 59, the Examiner previously asserted that these claims did not belong to the elected species. This assertion has been traversed, such as in the response dated January 22, 2007, and no reply or rebuttal to the traversal has been provided by the Examiner. The Restriction Requirement did not identify Figures 3 and 4 as a separate species, and Applicant was therefore entitled to respond to the Restriction Requirement on the basis that Figures 3 and 4 were not a separate species since the Examiner did not identify Figures 3 and 4 as a separate species. Furthermore, Figures 3 and 4 illustrate additional features of the elected species and the application clearly discloses that reduction elements having the features shown in Figs. 3 and 4 can be employed with the elected Species I. *See*, e.g., page 9, line 20 to page 10, line 8 of the specification.

Furthermore, the Examiner previously asserted that "Applicant never mentions that Figs. 3 and 4 (sic) belong to the elected species". In responding to the Restriction Requirement, Applicant did indeed assert that claims 8-10, 48-50 and 58-59 read on the elected species and thus the Applicants did consider that Figures 3 and 4 belonged to the elected species. *See* the "Amendment and Response to Restriction/Election Requirement" dated December 15, 2004, page 7, lines 14-17. Under the species election set forth by the Examiner, there could be no election of the species identified in the Restriction Requirement

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that would allow claims 8-10, 48-50 and 58-59 to be examined in the present application. Therefore, it was reasonable to conclude that there was no intention by the Examiner to set forth Figures 3 and 4 as a separate species since Figures 3 and 4 merely illustrate additional features of the elected species, and the specification clearly discloses that Figures 3 and 4 are included with at least the elected species of Figures 1 and 2. Therefore, the election of species was proper, claims 8-10, 48-50, 58 and 59 were identified as reading on the elected species, and examination of claims 8-10, 48-50, 58 and 59 in this application based on the species election is therefore proper and respectfully requested.

Claim 1, 44 and 55 were rejected as being anticipated by U.S. Patent No. 5,571,189 to Kuslich. Claim 1 has been amended to recite the features in claims 65 and 66. Claims 44 and 55 have been amended to recite "material filling said voids and rigidly fixing said plurality of reduction elements in engagement with one another in the intravertebral space for post-operative maintenance of the reduction of the vertebral body, said material locking said plurality of reduction elements relative to one another." Support for the amendment may be found in Figures 1 and 2 and throughout the specification at, for example, from page 9, line 7 to page 10, line 8.

Claims 1, 44 and 55 recite features the Examiner did not indicate were disclosed or suggested in Kuslich. Kuslich discloses a bag 40 with a chamber 44 that is positioned between vertebrae to provide for fusion of adjacent vertebrae. Chamber 44 is filled with graft medium 52 to facilitate fusion or fibrous union between opposing vertebrae 12, 14. The graft medium 52 includes finely chopped conical or cancellous bone chips for fusion or connective tissue when a fibrous union is desired. *See* col. 9, lines 53-58. There is no disclosure that the bone chips act sequentially one upon the other to apply an outwardly directed in an intravertebral space to restore a vertebral body, are positionable in an intravertebral space in contact with bone tissue, or that there are any means "means for rigidly fixing said plurality of reduction elements in engagement with one another in the intravertebral space for post-operative maintenance of the reduction of the vertebral body, said means including material filling said voids and locking said plurality of reduction elements relative to one another" as recited in amended claim 1. Accordingly, withdrawal of this basis of the rejection of claim 1 is respectfully requested.

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Amended claim 44 recites "a plurality of reduction elements positionable in an intravertebral space adjacent one another in contact with bony tissue, wherein said plurality of reduction elements act randomly and radially one upon the other upon sequential positioning thereof in the intravertebral space compressing cancellous bony tissue and applying an outwardly directed corrective force in the intravertebral space to restore the vertebral body; voids between respective ones of said plurality of reduction elements; and material filling said voids and rigidly fixing said plurality of reduction elements in engagement with one another in the intravertebral space for post-operative maintenance of the reduction of the vertebral body, said material locking said plurality of reduction elements relative to one another." For the reasons provided above, Kuslich also fails to disclose this combination of elements in claim 44.

Amended claim 55 recites "a plurality of reduction elements positionable in an intravertebral space adjacent one another in contact with bony tissue, wherein said plurality of reduction elements include exterior surface means for facilitating engagement between adjacent reduction elements and for facilitating said reduction elements acting randomly and radially one upon the other upon sequential positioning thereof in the intravertebral space to compress cancellous bony tissue and apply an outwardly directed corrective force in the intravertebral space to restore the vertebral body; voids between respective ones of said reduction elements; and material filling said voids and rigidly fixing said plurality of reduction elements in engagement with one another in the intravertebral space for post-operative maintenance of the reduction of the vertebral body, said material locking said plurality of reduction elements relative to one another." For the reasons provided above, Kuslich also fails to disclose this combination of elements in claim 55. Accordingly, withdrawal of this basis of the rejection of claims 1, 44 and 55 is respectfully requested.

Claims 1, 5-7, 11, 14, 44-47, 51, 54-57, 61 and 64-69 were rejected under 35 USC §103(a) as being unpatentable over U.S. Patent No. 5,755,797 to Baumgartner in view of U.S. Patent No. 6,620,196 to Trieu. Amended claim 1 recites the features of claims 65 and 66. The Office Action indicated that claims 65 and 66 are rejected over Baumgartner in view of Trieu, but does not provide any indication of how the Examiner considers the features of claims 65 or 66 are taught or suggested by the cited references.

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In Baumgartner, string material 20 is located within the passages formed through support members 7 and extends between adjacent support members 7. However, there is no disclosure that string 20 is configured to fill voids between respective ones of the support members 7 as recited for the material in claim 1. Furthermore, string 20 does not lock the support members 7 relative to one another. Baumgartner discloses string 20 includes stop parts 21 in the form of knots "so that a predetermined minimum distance A is observed between the support members 7 which corresponds at least approximately to the diameter of one of the support members 7...." *See* col. 5, lines 30-36. Support members 7 are thus spaced from one another along string 20 and thus freely move relative to one another even when connected with string 20. Baumgartner further teaches that "during loading, the support members are elastically deformed, and the compressive forces acting in the direction of the member axis are converted into edges stresses in the annulus fibrosus." *See* col. 1, line 62-65.

Trieu teaches a load bearing elastic body that is housed in an outer shell. The elastic body provides an implant with shape memory configured to allow extensive short term manual or other deformation without permanent deformation, cracks, tears, breakage or other damage. *See* col. 2, line 66 to col. 3, line 3. Trieu further teaches that the dimensions of the implant are sized to reside within a disc space between vertebrae. *See* col. 5, line 56 to col. 6, line 13. Trieu teaches that shell 30 is in contact with and bonded to elastic body 15 so that "the elastic body is in some way anchored, or otherwise fixed in place, by the outer shell so as to prevent its expulsion from, or excessive migration in, the disc cavity." *See* col. 5, lines 24-27. Furthermore, Trieu teaches that outer shell 30 "may be formed from a wide variety of biocompatible, preferably elastic, elastomeric or deformable natural or synthetic materials..." *See* col. 6, lines 62-65. Accordingly, Trieu teaches an elastic body 15 and a deformable outer shell 30. There is no teaching or suggestion in Trieu that outer shell 30 rigidly fixes components of elastic body 15 to one another, or that shell 30 fills voids between components of elastic body 15 to lock components of elastic body 15 relative to one another. Trieu therefore fails to remedy the deficiencies of Baumgartner, and the combination of references fails to teach or suggest all the elements of claim 1, including "means for rigidly fixing said plurality of reduction elements in engagement with one another" that includes "material filling said voids and locking said plurality of reduction elements relative to one another."

The combination of Baumgartner and Trieu also fails to teach or suggest all the elements in claim 44. As discussed above, Trieu teaches an elastic body 15 and a deformable outer shell 30. There is no teaching or suggestion in Trieu that outer shell 30 rigidly fixes components of elastic body 15 to one another, or that shell 30 fills voids between components of elastic body 15 to lock components of elastic body 15 relative to one another. Trieu therefore fails to remedy the deficiencies of Baumgartner, and the combination of references fails to teach or suggest all the elements of claim 44, including "material filling said voids and rigidly fixing said plurality of reduction elements in engagement with one another in the intravertebral space for post-operative maintenance of the reduction of the vertebral body, said material locking said plurality of reduction elements relative to one another."

The combination of Baumgartner and Trieu also fails to teach or suggest all the elements in claim 55. As discussed above, Trieu teaches an elastic body 15 and a deformable outer shell 30. There is no teaching or suggestion in Trieu that outer shell 30 rigidly fixes components of elastic body 15 to one another, or that shell 30 fills voids between components of elastic body 15 to lock components of elastic body 15 relative to one another. Trieu therefore fails to remedy the deficiencies of Baumgartner, and the combination of references fails to teach or suggest all the elements of claim 55, including "material filling said voids and rigidly fixing said plurality of reduction elements in engagement with one another in the intravertebral space for post-operative maintenance of the reduction of the vertebral body, said material locking said plurality of reduction elements relative to one another."

Furthermore, Baumgartner teaches away from any "means for rigidly fixing said plurality of reduction elements in engagement with one another" that includes "material filling said voids and locking said plurality of reduction elements relative to one another." Such an arrangement would render Baumgartner unsuitable for its intended purpose since Baumgartner teaches that "during loading, the support members are elastically deformed, and the compressive forces acting in the direction of the member axis are converted into edges stresses in the annulus fibrosus." See col. 1, line 62-65. Rigidly fixing the support members to one another and locking the support members to one another runs counter to the teachings of Baumgartner. Trieu fails to remedy these deficiencies. Therefore, Baumgartner teaches

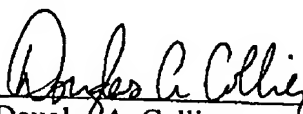
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away from any modification thereof that would properly support an obviousness rejection of claims 1, 44 or 55.

Claims 5-7, 11-14, 45-47, 51-54, 56-57, and 60-64, 67, and 69 depending from claims 1, 44 and 55 were rejected as being unpatentable over Baumgartner in view of Trieu are allowable at least since the claim from which each depends is allowable and for other reasons. Claims 67 and 69 depend from claims 1 and 44, respectively, and each recites "wherein said plurality of reduction elements are selected to occupy sufficient intravertebral space to restore a height of the vertebral body between endplates thereof." There is no indication of how these features are disclosed or taught in either Baumgartner or Trieu, and therefore a prima facie case for rejecting either of claims 67 or 69 has not been established. Furthermore, both Baumgartner and Trieu teach devices selected to occupy an intervertebral or spinal disc space between vertebrae, but not an intravertebral space. Therefore, withdrawal of the rejection of dependent claims 5-7, 11-14, 45-47, 51-54, 56-57, and 60-64, 67, and 69 is respectfully requested.

Reconsideration of the present application including claims 1-14 and 44-64, 67, and 69 in view of this response is respectfully requested. The Examiner is encouraged to contact the undersigned by telephone to resolve any outstanding matters concerning the present application.

Respectfully submitted

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